



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Information 10/06/2006

TO: Traviss McIntosh
Location: REM-5C29/5C18
Art Unit: 1623
Thursday, September 07, 2006

Case Serial Number: 10/608907

From: Alex Waclawiw
Location: Biotech-Chem Library
Rem 1A71
Phone: 272-2534

Alexandra.waclawiw@uspto.gov

Search Notes

20013

STIC-Biotech/ChemLib

From: TRAVISS MCINTOSH III [traviss.mcintosh@uspto.gov]
Sent: Tuesday, August 29, 2006 8:41 AM
To: STIC-Biotech/ChemLib
Subject: Database Search Request, Serial Number: 10/608,907

Requester:
TRAVISS MCINTOSH III (P/1623)

Art Unit:
GROUP ART UNIT 1623

Employee Number:
79380

Office Location:
REM 05C29

Phone Number:
(571)272-0657

Mailbox Number:
Rem - 5C29

Case serial number:
10/608,907

Class / Subclass(es):
514/42, 43, 45, 48, 49, 51

Earliest Priority Filing Date:
6/28/2002

Format preferred for results:
E-mail

Search Topic Information:

please search methods of treating viral infections (HCV) with 2'-deoxy, 2'-disubstituted nucleotides/nucleosides, wherein F is in one 2' position and either CH3 or CF3 is in the other 2' position. Base can be purine or pyrimidine. 3' position can be hydroxy, a protected hydroxy group, or a leaving group, and 5' position can be hydroxy, phospho containing, protected hydroxy group, or a leaving group.

Special Instructions and Other Comments:

This is my first search submitted electronically, so if there are better ways, please let me know. I am hoteling, so this will be my standard way to submit searches in the future. I tried to cut and paste or attach the structure to this, but cannot figure out how. If I have to fax the structures in, I will just fax the whole search request in in the future.

THanks - Traviss

Point of Contact:

Alexandra Waclawiw

Technical Info. Specialist

Searcher: OM1 6A02 Tel: 303-4491

Searcher Phone:

Date Searcher Picked up: 9-7

Date completed: 9-7

Searcher Prep Time: 25

Online Time: 24

Type of Search

NA# _____ AA# _____

S/L: _____ Oligomer: _____

Encode/Transl:

Structure #: 11 Text:

Inventor: _____ Litigation: _____

Vendors and cost where applicable

STN: \$ 309

DIALOG: _____

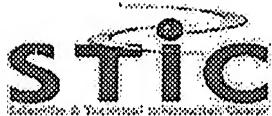
QUESTEL/ORBIT: _____

LEXIS/NEXIS: _____

SEQUENCE SYSTEM: _____

WWW/Internet: _____

Other (Specify): _____



STIC SEARCH RESULTS FEEDBACK FORM

Biotech-Chem Library

Questions about the scope or the results of the search? Contact **the searcher or contact:**

Mary Hale, Information Branch Supervisor
571-272-2507 Remsen 1 A51

Voluntary Results Feedback Form

➤ *I am an examiner in Workgroup:* *Example: 1610*

➤ *Relevant prior art found, search results used as follows:*

- 102 rejection
- 103 rejection
- Cited as being of interest.
- Helped examiner better understand the invention.
- Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- Foreign Patent(s)
- Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

➤ *Relevant prior art not found:*

- Results verified the lack of relevant prior art (helped determine patentability).
- Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/Biotech-Chem Library Remsen Bldg.



Traviss, McIntosh 10/608,907

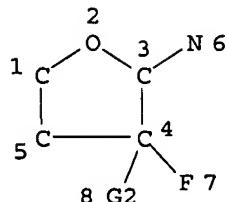
=> d his 11-12;d que stqat 12; d his 13-

(FILE 'REGISTRY' ENTERED AT 09:28:39 ON 07 SEP 2006)

DEL HIS Y
ACT MCINTOSH/A

L1 STR
L2 25 SEA FILE=REGISTRY SSS FUL L1

L1 STR



VAR G2=ME/CF3

NODE ATTRIBUTES:

NSPEC IS R AT 6
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I
NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE

L2 25 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 43 ITERATIONS

25 ANSWERS

SEARCH TIME: 00.00.01

FILE 'CAPLUS' ENTERED AT 09:29:29 ON 07 SEP 2006

L3 7 SEA ABB=ON PLU=ON L2
D SCAN TI
E STORER R/AU
L4 229 SEA ABB=ON PLU=ON STORER R?/AU
E GOSSELIN G?/AU
L5 317 SEA ABB=ON PLU=ON GOSSELIN G?/AU
L6 213 SEA ABB=ON PLU=ON SOMMADOSSI J?/AU
L7 694 SEA ABB=ON PLU=ON (L4 OR L5 OR L6)
L8 0 SEA ABB=ON PLU=ON L7 AND L3
L9 411390 SEA ABB=ON PLU=ON NUCLEOTID?/OBI OR NUCLEOSID?/OBI OR
FLAVIVIR?/OBI
L10 242 SEA ABB=ON PLU=ON L9 AND L7
L11 13 SEA ABB=ON PLU=ON L10 AND FLAVIVIR?/OBI
D QUE STAT NOS L11

=> fil reg
FILE 'REGISTRY' ENTERED AT 09:32:47 ON 07 SEP 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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Property values tagged with IC are from the ZIC/VINITI data file
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STRUCTURE FILE UPDATES: 6 SEP 2006 HIGHEST RN 905963-91-9
DICTIONARY FILE UPDATES: 6 SEP 2006 HIGHEST RN 905963-91-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

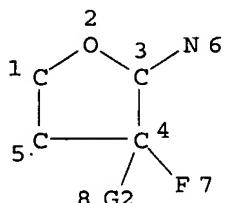
TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> d que stat 12
L1 STR



VAR G2=ME/CF3
NODE ATTRIBUTES:
NSPEC IS R AT 6
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE
L2 25 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 43 ITERATIONS 25 ANSWERS
SEARCH TIME: 00.00.01

=> fil caplus
FILE 'CAPLUS' ENTERED AT 09:32:53 ON 07 SEP 2006

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FILE COVERS 1907 - 7 Sep 2006 VOL 145 ISS 11
 FILE LAST UPDATED: 6 Sep 2006 (20060906/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>
 'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

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=> d que nos 13
L1      STR
L2      25 SEA FILE=REGISTRY SSS FUL L1
L3      7 SEA FILE=CAPLUS ABB=ON  PLU=ON  L2
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=> => d que stat nos 111
L4      229 SEA FILE=CAPLUS ABB=ON  PLU=ON  STORER R?/AU
L5      317 SEA FILE=CAPLUS ABB=ON  PLU=ON  GOSSELIN G?/AU
L6      213 SEA FILE=CAPLUS ABB=ON  PLU=ON  SOMMADODSI J?/AU
L7      694 SEA FILE=CAPLUS ABB=ON  PLU=ON  (L4 OR L5 OR L6)
L9      411390 SEA FILE=CAPLUS ABB=ON  PLU=ON  NUCLEOTID?/OBI OR NUCLEOSID?/OB
          I OR FLAVIVIR?/OBI
L10     242 SEA FILE=CAPLUS ABB=ON  PLU=ON  L9 AND L7
L11     13 SEA FILE=CAPLUS ABB=ON  PLU=ON  L10 AND FLAVIVIR?/OBI
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=> d .ca hitstr 13 1-7;d bib ab 111 1-13

↳ inventor search

L3 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2006:603846 CAPLUS
 DOCUMENT NUMBER: 145:76603
 TITLE: Fluorinated pyrrolo[2,3-d]pyrimidine nucleosides for
 the treatment of RNA-dependent RNA viral infection
 INVENTOR(S): Maccoss, Malcolm; Olsen, David B.; Leone, Joseph;
 Durette, Philippe L.
 PATENT ASSIGNEE(S): Merck & Co., Inc., USA
 SOURCE: PCT Int. Appl., 46 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2006065335 A2 20060622 WO 2005-US37224 20051017
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
 LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ,
 NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
 SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,
 YU, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2004-620743P P 2004/021
 US 2005-651366P P 2005/0209

OTHER SOURCE(S): MARPAT 145:76603

ED Entered STN: 23 Jun 2006

AB The present invention provides fluorinated pyrrolo[2,3, d]pyrimidine nucleoside compds. which are inhibitors of RNA-dependent RNA viral polymerase. These compds. are inhibitors of RNA-dependent RNA viral replication and are useful for the treatment of RNA-dependent RNA viral infection. They are particularly useful as precursors to inhibitors of hepatitis C virus (HCV) NS5B polymerase, as precursors to inhibitors of HCV replication, and/or for the treatment of hepatitis C infection. The invention also describes pharmaceutical compns. containing such fluorinated pyrrolo[2,3- d]pyrimidine nucleoside alone or in combination with other agents active against RNA-dependent RNA viral infection, in particular HCV infection. Also disclosed are methods of inhibiting RNA-dependent RNA polymerase, inhibiting RNA-dependent RNA viral replication, and/or treating RNA-dependent RNA viral infection with the fluorinated pyrrolo[2,3- d]pyrimidine nucleoside of the present invention.

CC 1-5 (Pharmacology)

Section cross-reference(s): 28

IT 892389-29-6 892389-31-0

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(fluorinated pyrrolopyrimidine nucleosides for treatment of RNA-dependent RNA viral infection)

IT 22276-95-5P 443643-17-2P 582313-56-2P 582313-57-3P 729596-49-0P
 741686-50-0P 892389-00-3P 892389-02-5P 892389-04-7P 892389-08-1P
 892389-12-7P 892389-14-9P 892389-17-2P 892389-19-4P 892389-21-8P
 892389-23-0P 892389-25-2P 892389-27-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(fluorinated pyrrolopyrimidine nucleosides for treatment of RNA-dependent RNA viral infection)

IT 892389-06-9P 892389-10-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(fluorinated pyrrolopyrimidine nucleosides for treatment of RNA-dependent RNA viral infection)

IT 892389-29-6 892389-31-0

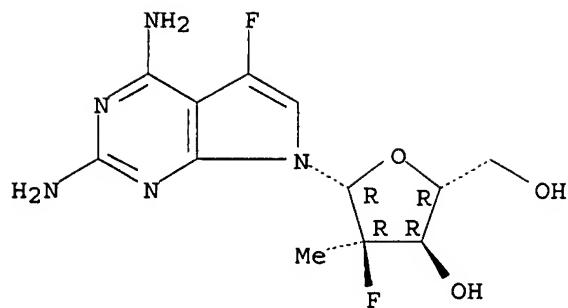
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(fluorinated pyrrolopyrimidine nucleosides for treatment of RNA-dependent RNA viral infection)

RN 892389-29-6 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidine-2,4-diamine, 7-[(2R)-2-deoxy-2-fluoro-2-methyl-
 β-D-erythro-pentofuranosyl]-5-fluoro- (9CI) (CA INDEX NAME)

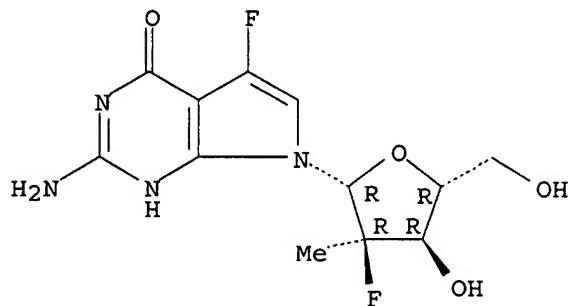
Absolute stereochemistry.



RN 892389-31-0 CAPLUS

CN 4H-Pyrrolo[2,3-d]pyrimidin-4-one, 2-amino-7-[(2R)-2-deoxy-2-fluoro-2-methyl-beta-D-erythro-pentofuranosyl]-5-fluoro-1,7-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



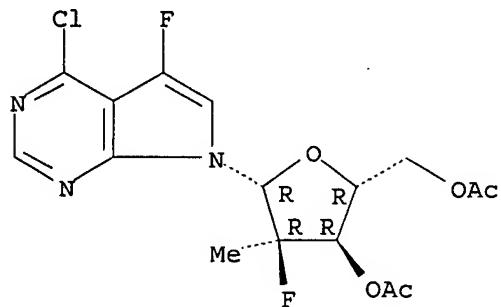
IT 892389-27-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (fluorinated pyrrolopyrimidine nucleosides for treatment of RNA-dependent RNA viral infection)

RN 892389-27-4 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidine, 4-chloro-7-[(2R)-3,5-di-O-acetyl-2-deoxy-2-fluoro-2-methyl-beta-D-erythro-pentofuranosyl]-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



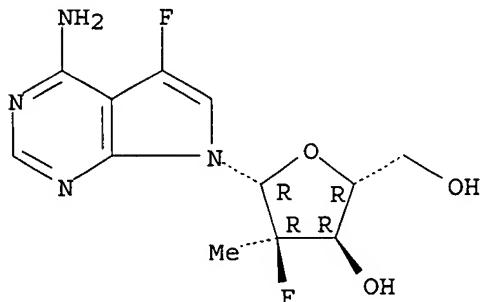
IT 892389-10-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (fluorinated pyrrolopyrimidine nucleosides for treatment of
 RNA-dependent RNA viral infection)

RN 892389-10-5 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[(2R)-2-deoxy-2-fluoro-2-methyl-
 β-D-erythro-pentofuranosyl]-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:478128 CAPLUS

DOCUMENT NUMBER: 145:202057

TITLE: Inhibition of hepatitis C replicon RNA synthesis by
 β-D-2'-deoxy-2'-fluoro-2'-C-methylcytidine: a
 specific inhibitor of hepatitis C virus replication

Stuyver, Lieven J.; McBrayer, Tamara R.; Tharnish,
 Phillip M.; Clark, Jeremy; Hollecker, Laurent; Lostia,
 Stefania; Nachman, Tammy; Grier, Jason; Bennett,
 Matthew A.; Xie, Meng-Yu; Schinazi, Raymond F.;
 Morrey, John D.; Julander, Justin L.; Furman, Phillip
 A.; Otto, Michael J.

CORPORATE SOURCE: Pharmasset Inc, Princeton, NJ, USA

SOURCE: Antiviral Chemistry & Chemotherapy (2006), 17(2),
 79-87

CODEN: ACCHEH; ISSN: 0956-3202

PUBLISHER: International Medical Press, Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 22 May 2006

AB β-D-2'-Deoxy-2'-fluoro-2'-C-methylcytidine (PSI-6130) is a cytidine
 analog with potent and selective anti-hepatitis C virus (HCV) activity in
 the subgenomic HCV replicon assay, 90% effective concentration (EC90) = 4.6 ±
 2.0 μM. The spectrum of activity and cytotoxicity profile of PSI-6130
 was evaluated against a diverse panel of viruses and cell types, and
 against two addnl. HCV-1b replicons. The S282T mutation, which confers
 resistance to 2'-C-Me adenosine and other 2'-methylated nucleosides,
 showed only a 6.5-fold increase in EC90. When assayed for activity
 against bovine diarrhoea virus (BVDV), which is typically used as a
 surrogate assay to identify compds. active against HCV, PSI-6130 showed no
 anti-BVDV activity. Weak antiviral activity was noted against other
 flaviviruses, including West Nile virus, Dengue type 2, and yellow fever
 virus. These results indicate that PSI-6130 is a specific inhibitor of
 HCV. PSI-6130 showed little or no cytotoxicity against various cell
 types, including human peripheral blood mononuclear and human bone marrow
 progenitor cells. No mitochondrial toxicity was observed with PSI-6130. The
 reduced activity against the RdRp S282T mutant suggests that PSI-6130 is

an inhibitor of replicon RNA synthesis. Finally, the no-effect dose for mice treated i.p. with PSI-6130 for six consecutive days was ≥ 100 mg/kg per day.

CC 1-5 (Pharmacology)

IT 817204-33-4, PSI 6130

RL: ADV (Adverse effect, including toxicity); DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(PSI-6130 inhibition of hepatitis C replicon RNA synthesis)

IT 817204-33-4, PSI 6130

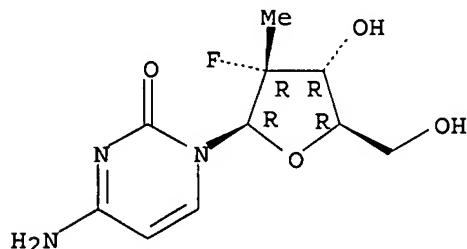
RL: ADV (Adverse effect, including toxicity); DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(PSI-6130 inhibition of hepatitis C replicon RNA synthesis)

RN 817204-33-4 CAPLUS

CN Cytidine, 2'-deoxy-2'-fluoro-2'-methyl-, (2'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:269477 CAPLUS

DOCUMENT NUMBER: 144:312289

TITLE: Preparation of alkyl-substituted 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs via condensation of the lactone to nucleosides as potential antiviral agents

INVENTOR(S): Chun, Byoung-Kwon; Wang, Peiyuan

PATENT ASSIGNEE(S): Pharmasset, Inc., USA

SOURCE: PCT Int. Appl., 74 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006031725	A2	20060323	WO 2005-US32406	20050913
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,				

IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM

US 2006122146	A1	20060608	US 2005-225425	20050913
PRIORITY APPLN. INFO.:			US 2004-609783P	P 20040914
			US 2004-610035P	P 20040915
			US 2005-666230P	P 20050329

OTHER SOURCE(S): MARPAT 144:312289

ED Entered STN: 23 Mar 2006

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A process for preparing of 2-deoxy-2-fluoro-2-methyl-D-ribonolactones, I, wherein R1 and R2 can independently be H, CH₃, acetyl, benzoyl, pivaloyl, 4-nitrobenzoyl, 3-nitrobenzoyl, 2-nitrobenzoyl, 4-chlorobenzoyl, 3-chlorobenzoyl, 2-chlorobenzoyl, 4-methylbenzoyl, 3-methylbenzoyl, 2-methylbenzoyl, 4-phenylbenzoyl, benzyl, 4-methoxybenzyl, trityl, trialkylsilyl, t-butyl-dialkylsilyl, t-butyldiphenylsilyl, TIPDS, THP, MOM, or MEM are prepared and used in the condensation to 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs. Thus, 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs II and III, wherein X is a halogen; Y is N or CH; Z is a halogen, hydroxyl, ether, thiol, thioether, (un)substituted amine or alkyl; R1' is alkyl, vinyl, ethynyl; R2' and R3' can be same or different H, alkyl, arylalkyl, acyl, cyclic acetal such as 2',3'-O-isopropylidene or 2',3-O-benzylidene, or 2',3'-cyclic carbonate; R4, R5, and R6 are independently H, halogen, hydroxyl, ether, thiol, thioether, N₃, (un)substituted amine, (un)substituted amido, alkyl, halogenated alkyl, alkenyl, halogenated alkenyl, alkynyl, halogenated alkynyl, hydroxy alkyl, alkoxy are prepared and are potential anti-HCV agents. Specifically, IV was prepared in 88 % yield via condensation, alkylation and stereoselective fluorination reactions and can exhibit potential use as an anti-HCV agent.

CC 33-9 (Carbohydrates)

Section cross-reference(s): 1, 63

IT 874638-80-9P 879551-05-0P 879551-07-2P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of alkyl-substituted 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs via condensation of the lactone to nucleosides)

IT 879551-07-2P

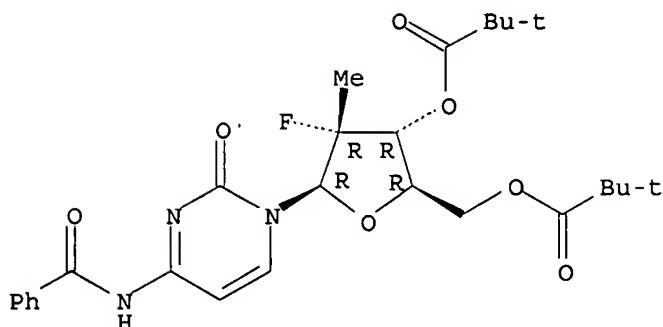
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of alkyl-substituted 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs via condensation of the lactone to nucleosides)

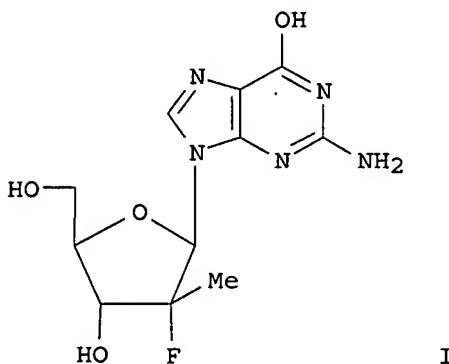
RN 879551-07-2 CAPLUS

CN Cytidine, N-benzoyl-2'-deoxy-2'-fluoro-2'-methyl-, 3',5'-bis(2,2-dimethylpropanoate), (2'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2006:128527 CAPLUS
 DOCUMENT NUMBER: 144:370341
 TITLE: Synthesis and antiviral activity of
 2'-deoxy-2'-fluoro-2'-C-methyl purine nucleosides as
 inhibitors of hepatitis C virus RNA replication
 Clark, Jeremy L.; Mason, J. Christian; Hollecker,
 Laurent; Stuyver, Lieven J.; Tharnish, Phillip M.;
 McBrayer, Tamara R.; Otto, Michael J.; Furman, Phillip
 A.; Schinazi, Raymond F.; Watanabe, Kyoichi A.
 Pharmasset, Inc., Tucker, GA, 30084, USA
 SOURCE: Bioorganic & Medicinal Chemistry Letters (2006),
 16(6), 1712-1715
 CODEN: BMCL8; ISSN: 0960-894X
 PUBLISHER: Elsevier B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 144:370341
 ED Entered STN: 12 Feb 2006
 GI



AB A series of purine nucleosides, e.g. I, containing the 2'-deoxy-2'-fluoro-2'-C-methylribofuranosyl moiety were synthesized and evaluated as potential inhibitors of the hepatitis C virus in vitro. Of the nucleosides that were synthesized, only those possessing a 2-amino group on the purine base reduced the levels of HCV RNA in a sub-genomic replicon assay.
 CC 33-9 (Carbohydrates)

Section cross-reference(s): 1, 3, 6

IT 881881-89-6P
 RL: BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
 (synthesis and antiviral activity of deoxyfluoromethyl purine nucleosides as inhibitors of hepatitis C virus RNA replication)

IT 15397-12-3P 374750-30-8P 817204-42-5P 817204-45-8P
 818374-78-6P
 RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (synthesis and antiviral activity of deoxyfluoromethyl purine nucleosides as inhibitors of hepatitis C virus RNA replication)

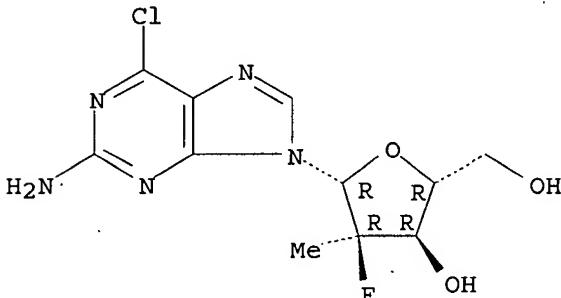
IT 817204-41-4P 881881-83-0P 881881-84-1P 881881-85-2P
 881881-88-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (synthesis and antiviral activity of deoxyfluoromethyl purine nucleosides as inhibitors of hepatitis C virus RNA replication)

IT 881881-89-6P
 RL: BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
 (synthesis and antiviral activity of deoxyfluoromethyl purine nucleosides as inhibitors of hepatitis C virus RNA replication)

RN 881881-89-6 CAPLUS

CN 9H-Purin-2-amine, 6-chloro-9-[(2R)-2-deoxy-2-fluoro-2-methyl-β-D-erythro-pentofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

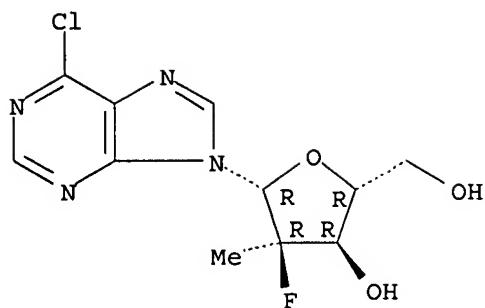


IT 817204-42-5P 817204-45-8P 818374-78-6P
 RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (synthesis and antiviral activity of deoxyfluoromethyl purine nucleosides as inhibitors of hepatitis C virus RNA replication)

RN 817204-42-5 CAPLUS

CN 9H-Purine, 6-chloro-9-[(2R)-2-deoxy-2-fluoro-2-methyl-β-D-erythro-pentofuranosyl]- (9CI) (CA INDEX NAME)

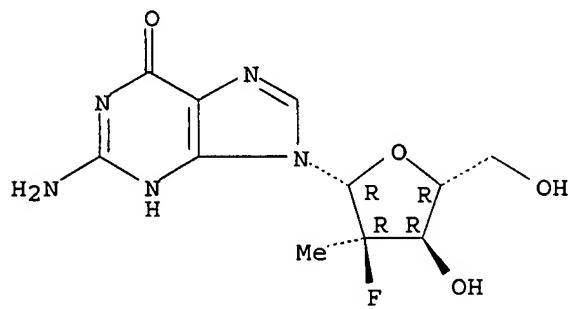
Absolute stereochemistry.



RN 817204-45-8 CAPLUS

CN Guanosine, 2'-deoxy-2'-fluoro-2'-methyl-, (2'R)- (9CI) (CA INDEX NAME)

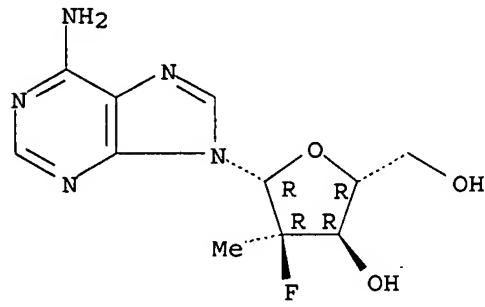
Absolute stereochemistry.



RN 818374-78-6 CAPLUS

CN Adenosine, 2'-deoxy-2'-fluoro-2'-methyl-, (2'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 817204-41-4P 881881-83-0P 881881-88-5P

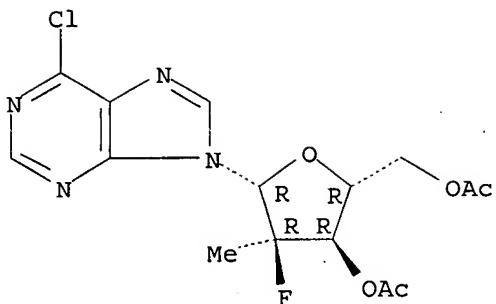
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and antiviral activity of deoxyfluoromethyl purine nucleosides as inhibitors of hepatitis C virus RNA replication)

RN 817204-41-4 CAPLUS

CN 9H-Purine, 6-chloro-9-[(2R)-3,5-di-O-acetyl-2-deoxy-2-fluoro-2-methyl-β-D-erythro-pentofuranosyl]- (9CI) (CA INDEX NAME)

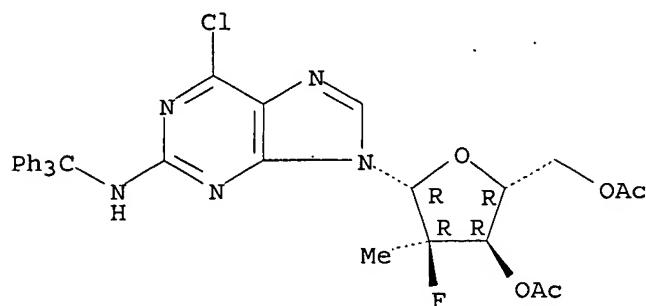
Absolute stereochemistry.



RN 881881-83-0 CAPLUS

CN 9H-Purin-2-amine, 6-chloro-9-[(2R)-3,5-di-O-acetyl-2-deoxy-2-fluoro-2-methyl-beta-D-erythro-pentofuranosyl]-N-(triphenylmethyl)- (9CI) (CA INDEX NAME)

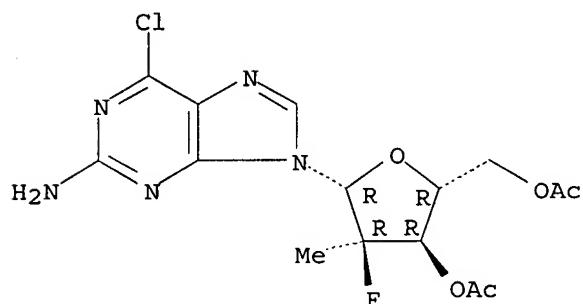
Absolute stereochemistry.



RN 881881-88-5 CAPLUS

CN 9H-Purin-2-amine, 6-chloro-9-[(2R)-3,5-di-O-acetyl-2-deoxy-2-fluoro-2-methyl-beta-D-erythro-pentofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:103884 CAPLUS

DOCUMENT NUMBER: 144:171198

TITLE: Preparation of alkyl-substituted 2-deoxy-2-fluoro-D-

ribofuranosyl pyrimidine and purine nucleoside analogs via condensation of the lactone to nucleosides as potential antiviral agents

INVENTOR(S): Wang, Peiyuan; Stec, Wojciech; Clark, Jeremy; Chun, Byoung-Kwon; Shi, Junxing; Du, Jinfa
 PATENT ASSIGNEE(S): Pharmasset, Inc., USA
 SOURCE: PCT Int. Appl., 34 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006012440	A2	20060202	WO 2005-US25916	20050721
WO 2006012440	A3	20060727		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRIORITY APPLN. INFO.:			US 2004-589866P	P 20040721
			US 2004-608320P	P 20040909

OTHER SOURCE(S): MARPAT 144:171198
 ED Entered STN: 03 Feb 2006
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A process for preparing of 2-deoxy-2-fluoro-2-methyl-D-ribonolactones, I, wherein R1 and R2 can independently be H, CH₃, acetyl, benzoyl, pivaloyl, 4-nitrobenzoyl, 3-nitrobenzoyl, 2-nitrobenzoyl, 4-chlorobenzoyl, 3-chlorobenzoyl, 2-chlorobenzoyl, 4-methylbenzoyl, 3-methylbenzoyl, 2-methylbenzoyl, 4-phenylbenzoyl, benzyl, 4-methoxybenzyl, trityl, trialkylsilyl, t-butyl-dialkylsilyl, t-butyldiphenylsilyl, TIPDS, THP, MOM, or MEM are prepared and used in the condensation to 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs. Thus, 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs II and III, wherein X is a halogen; Y is N or CH; Z is a halogen, hydroxyl, ether, thiol, thioether, (un)substituted amine or alkyl; R1' is alkyl, vinyl, ethynyl; R2' and R3' can be same or different H, alkyl, arylalkyl, acyl, cyclic acetal such as 2',3'-O-isopropylidene or 2',3-O-benzylidene, or 2',3'-cyclic carbonate; R4, R5, and R6 are independently H, halogen, hydroxyl, ether, thiol, thioether, N₃, (un)substituted amine, (un)substituted amido, alkyl, halogenated alkyl, alkenyl, halogenated alkenyl, alkynyl, halogenated alkynyl, hydroxy alkyl, alkoxy are prepared and are potential anti-HCV agents. Specifically, IV was prepared (no yield, claimed) via condensation, alkylation and stereoselective fluorination reactions and can exhibit potential use as an

anti-HCV agent.

CC 33-9 (Carbohydrates)

Section cross-reference(s): 1, 63

IT 53008-90-5P 81997-76-4P 93635-76-8P 135120-06-8P 874638-79-6P
 874638-80-9P 874638-81-0P 874638-84-3P 874638-85-4P 874638-86-5P
 874638-87-6P 874638-89-8P 874638-90-1P 874638-91-2P 874638-93-4P
 874638-96-7P 874638-97-8P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of alkyl-substituted 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs via condensation of the lactone to nucleosides)

IT 729596-46-7P 817204-32-3P 817204-33-4P
 874638-82-1P 874638-83-2P 874638-88-7P 874638-92-3P
 874638-94-5P 874638-95-6P 874638-98-9P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
 (preparation of alkyl-substituted 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs via condensation of the lactone to nucleosides)

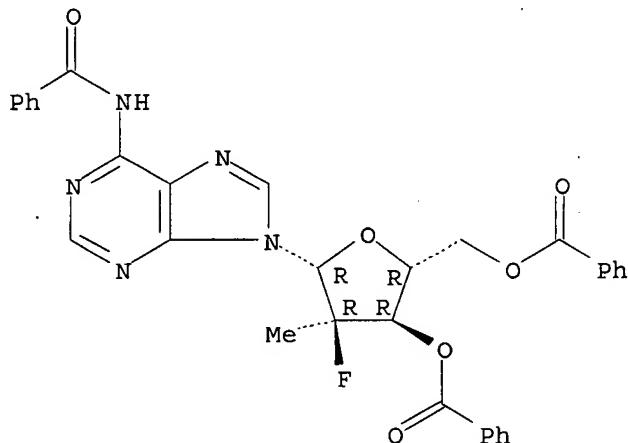
IT 874638-97-8P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of alkyl-substituted 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs via condensation of the lactone to nucleosides)

RN 874638-97-8 CAPLUS

CN Adenosine, N-benzoyl-2'-deoxy-2'-fluoro-2'-methyl-, 3',5'-dibenzoate, (2'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



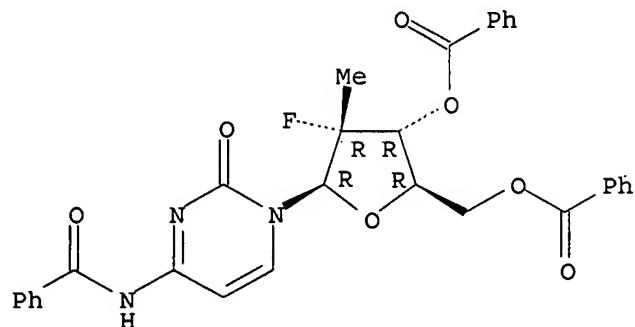
IT 817204-32-3P 817204-33-4P 874638-82-1P
 874638-94-5P 874638-95-6P 874638-98-9P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
 (preparation of alkyl-substituted 2-deoxy-2-fluoro-D-ribofuranosyl pyrimidine and purine nucleoside analogs via condensation of the lactone to nucleosides)

RN 817204-32-3 CAPLUS

CN Cytidine, N-benzoyl-2'-deoxy-2'-fluoro-2'-methyl-, 3',5'-dibenzoate, (2'R)- (9CI) (CA INDEX NAME)

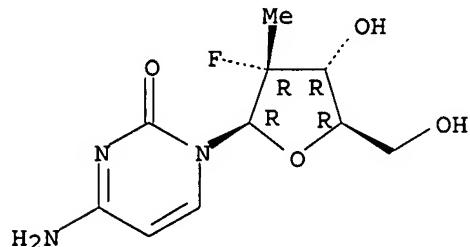
Absolute stereochemistry. Rotation (+).



RN 817204-33-4 CAPLUS

CN Cytidine, 2'-deoxy-2'-fluoro-2'-methyl-, (2'R)- (9CI) (CA INDEX NAME)

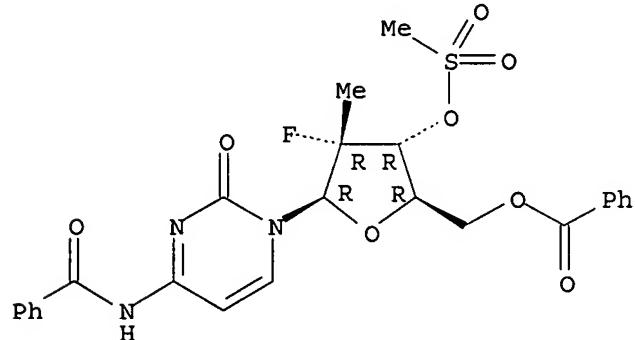
Absolute stereochemistry. Rotation (+).



RN 874638-82-1 CAPLUS

CN Benzamide, N-[1-[(2R)-5-O-benzoyl-2-deoxy-2-fluoro-2-methyl-3-O-(methylsulfonyl)-β-D-erythro-pentofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

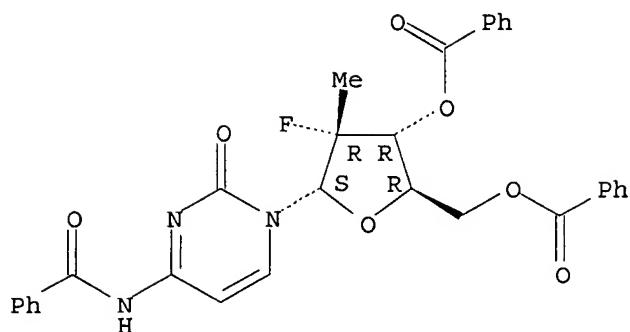
Absolute stereochemistry.



RN 874638-94-5 CAPLUS

CN Benzamide, N-[1-[(2R)-3,5-di-O-benzoyl-2-deoxy-2-fluoro-2-methyl-α-D-erythro-pentofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

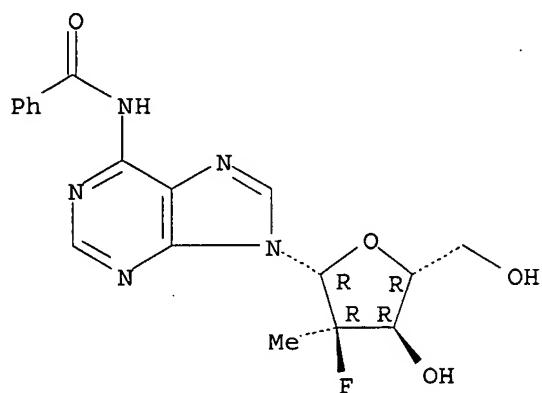
Absolute stereochemistry.



RN 874638-95-6 CAPLUS

CN Adenosine, N-benzoyl-2'-deoxy-2'-fluoro-2'-methyl-, (2'R)- (9CI) (CA INDEX NAME)

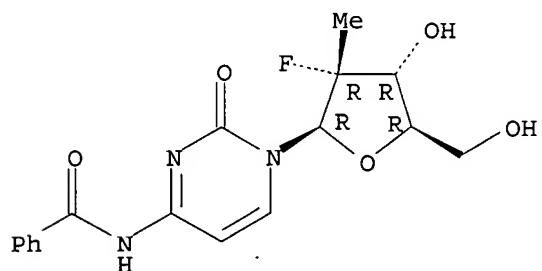
Absolute stereochemistry.



RN 874638-98-9 CAPLUS

CN Cytidine, N-benzoyl-2'-deoxy-2'-fluoro-2'-methyl-, (2'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:648160 CAPLUS

DOCUMENT NUMBER: 143:248607

TITLE: Design, Synthesis, and Antiviral Activity of

AUTHOR(S): 2'-Deoxy-2'-fluoro-2'-C-methyl-cytidine, a Potent Inhibitor of Hepatitis C Virus Replication
 Clark, Jeremy L.; Hollecker, Laurent; Mason, J. Christian; Stuyver, Lieven J.; Tharnish, Phillip M.; Lostia, Stefania; McBrayer, Tamara R.; Schinazi, Raymond F.; Watanabe, Kyoichi A.; Otto, Michael J.; Furman, Phillip A.; Stec, Wojciech J.; Patterson, Steven E.; Pankiewicz, Krzysztof W.

CORPORATE SOURCE: Pharmasset, Inc., Princeton, NJ, 08540, USA
 SOURCE: Journal of Medicinal Chemistry (2005), 48(17), 5504-5508
 CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 26 Jul 2005

AB The pyrimidine nucleoside- β -D-2'-deoxy-2'-fluoro-2'-C-methylcytidine (I) was designed as a hepatitis C virus RNA-dependent RNA polymerase (HCV RdRp) inhibitor. The title compound was obtained by a DAST fluorination of N4-benzoyl-1-(2-methyl-3,5-di-O-benzoyl- β -D-arabinofuranosyl)cytosine to provide N4-benzoyl-1-(2-fluoro-2-methyl-3,5-di-O-benzoyl- β -D-ribofuranosyl)cytosine. The protected 2'-C-methylcytidine was obtained as a byproduct from the DAST fluorination and allowed for the preparation of two biol. active compds. from a common precursor. Compound I and 2'-C-methylcytidine were assayed in a sub-genomic HCV replicon assay system and found to be potent and selective inhibitors of HCV replication. Compd. I shows increased inhibitory activity in the HCV replicon assay compared to 2'-C-methylcytidine and low cellular toxicity.

CC 33-9 (Carbohydrates)

Section cross-reference(s): 1, 7

IT 817204-33-4P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
 (design, synthesis via fluorination, and antiviral activity of 2'-deoxy-2'-fluoro-2'-C-methyl-cytidine, a potent inhibitor of Hepatitis C virus replication)

IT 863329-66-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (design, synthesis via fluorination, and antiviral activity of 2'-deoxy-2'-fluoro-2'-C-methyl-cytidine, a potent inhibitor of Hepatitis C virus replication)

IT 817204-32-3P 817204-34-5P 817204-35-6P 863329-62-8P

863329-63-9P 863329-64-0P 863329-65-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(design, synthesis via fluorination, and antiviral activity of 2'-deoxy-2'-fluoro-2'-C-methyl-cytidine, a potent inhibitor of Hepatitis C virus replication)

IT 119804-96-5P 817204-38-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(design, synthesis via fluorination, and antiviral activity of 2'-deoxy-2'-fluoro-2'-C-methyl-cytidine, a potent inhibitor of Hepatitis C virus replication)

IT 817204-33-4P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

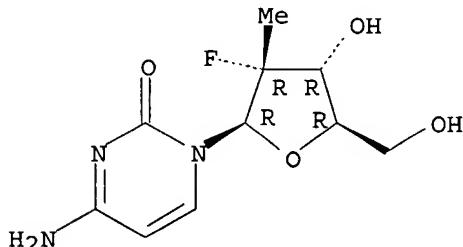
(design, synthesis via fluorination, and antiviral activity of

2'-deoxy-2'-fluoro-2'-C-methyl-cytidine, a potent inhibitor of Hepatitis C virus replication)

RN 817204-33-4 CAPLUS

CN Cytidine, 2'-deoxy-2'-fluoro-2'-methyl-, (2'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 863329-66-2P

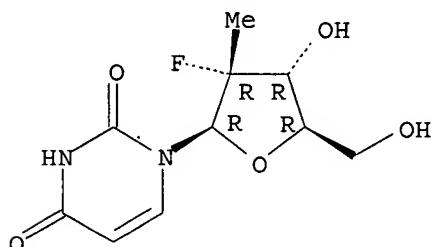
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(design, synthesis via fluorination, and antiviral activity of 2'-deoxy-2'-fluoro-2'-C-methyl-cytidine, a potent inhibitor of Hepatitis C virus replication)

RN 863329-66-2 CAPLUS

CN Uridine, 2'-deoxy-2'-fluoro-2'-methyl-, (2'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 817204-32-3P 863329-65-1P

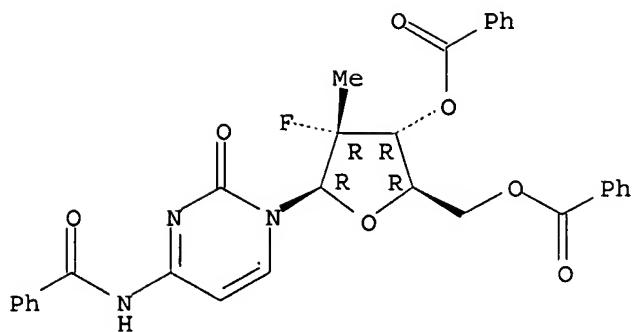
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(design, synthesis via fluorination, and antiviral activity of 2'-deoxy-2'-fluoro-2'-C-methyl-cytidine, a potent inhibitor of Hepatitis C virus replication)

RN 817204-32-3 CAPLUS

CN Cytidine, N-benzoyl-2'-deoxy-2'-fluoro-2'-methyl-, 3',5'-dibenzoate, (2'R)- (9CI) (CA INDEX NAME)

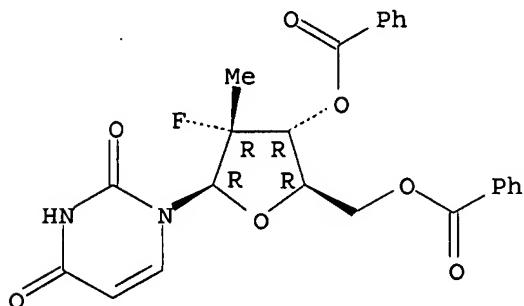
Absolute stereochemistry. Rotation (+).



RN 863329-65-1 CAPLUS

CN Uridine, 2'-deoxy-2'-fluoro-2'-methyl-, 3',5'-dibenzoate, (2'R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



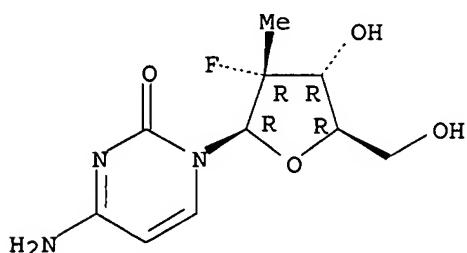
IT 817204-38-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(design, synthesis via fluorination, and antiviral activity of
2'-deoxy-2'-fluoro-2'-C-methyl-cytidine, a potent inhibitor of
Hepatitis C virus replication)

RN 817204-38-9 CAPLUS

CN Cytidine, 2'-deoxy-2'-fluoro-2'-methyl-, monohydrochloride, (2'R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



● HCl

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

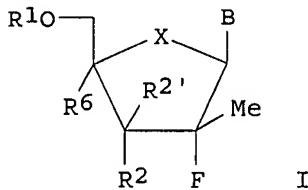
L3 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005:34765 CAPLUS
 DOCUMENT NUMBER: 142:94074
 TITLE: Preparation of modified fluorinated (2'R)-2'-deoxy-2'-fluoro-2'-C-methyl nucleoside analogs as antiviral agents
 INVENTOR(S): Clark, Jeremy
 PATENT ASSIGNEE(S): Pharmasset, Ltd., Barbados
 SOURCE: PCT Int. Appl., 228 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005003147	A2	20050113	WO 2004-US12472	20040421
WO 2005003147	A3	20050303		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004253860	A1	20050113	AU 2004-253860	20040421
CA 2527657	AA	20050113	CA 2004-2527657	20040421
US 2005009737	A1	20050113	US 2004-828753	20040421
EP 1633766	A2	20060315	EP 2004-775900	20040421
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR				
BR 2004010846	A	20060627	BR 2004-10846	20040421
CN 1816558	A	20060809	CN 2004-80019148	20040421
NO 2005006221	A	20051228	NO 2005-6221	20051228
PRIORITY APPLN. INFO.:			US 2003-474368P	P 20030530
			WO 2004-US12472	W 20040421

OTHER SOURCE(S): MARPAT 142:94074

ED Entered STN: 14 Jan 2005

GI

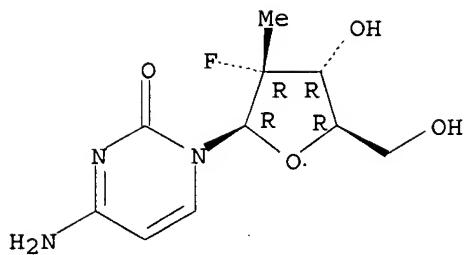


AB The disclosed invention provides nucleoside analogs I, wherein B is purine

and pyrimidine nucleobase; X is O, S, CH₂, Se, NH, N-alkyl, CHW, C(W)2; W is F, Cl, Br, iodo; R1 is H, phosphate, H-phosphonate, acyl, Ph, alkyl, carboxyalkylamino, sulfonate ester, peptide, amino acid, sugar residue; R2 and R2' are independently H, alkyl, alkenyl, alkynyl, vinyl, N3, CN, halogen, NO₂, ester, alkoxy, thioalkyl, sulfoxide, sulfonyl; R6 is alkyl, CN, Me, OMe, OEt, CH₂OH, CH₂F, N3, CHCN, CH₂N₃, CH₂NH₂, CH₂NHMe, CH₂NMe₂, alkynyl; and methods of treating a Flaviviridae infection, including hepatitis C virus, West Nile Virus, yellow fever virus, and a rhinovirus infection in a host, including animals, and especially human, using a (2'R)-2'-deoxy-2'-fluoro-2'-C-Me nucleosides, or a pharmaceutically acceptable salt or prodrug thereof. Thus, (2'R)-2'-deoxy-2'-fluoro-2'-C-methylcytidine was prepared and tested as antiviral agent. The effects the nucleoside analogs tested on human bone marrow cells are reported. (2'R)-2'-deoxy-2'-fluoro-2'-C-methylcytidine shows activity against Rhinovirus, West Nile virus, Yellow Fever virus, and Dengue virus. Cytotoxicity and effect of nucleoside analogs on human bone marrow cells are reported.

IC ICM C07H019-00
 CC 33-9 (Carbohydrates)
 Section cross-reference(s): 1, 63
 IT 817204-33-4P
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (preparation of modified fluorinated (2'R)-2'-deoxy-2'-fluoro-2'-C-Me nucleoside analogs as antiviral agents)
 IT 817204-38-9P 817204-42-5P 817204-43-6P
 817204-45-8P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of modified fluorinated (2'R)-2'-deoxy-2'-fluoro-2'-C-Me nucleoside analogs as antiviral agents)
 IT 15397-12-3 20724-73-6 374750-27-3 374750-28-4 817204-44-7
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (preparation of modified fluorinated (2'R)-2'-deoxy-2'-fluoro-2'-C-Me nucleoside analogs as antiviral agents)
 IT 13089-48-0P 69304-43-4P 103285-18-3P 119411-03-9P 129932-37-2P
 817204-29-8P 817204-30-1P 817204-31-2P 817204-32-3P
 817204-34-5P 817204-35-6P 817204-36-7P 817204-37-8P
 817204-39-0P 817204-40-3P 817204-41-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of modified fluorinated (2'R)-2'-deoxy-2'-fluoro-2'-C-Me nucleoside analogs as antiviral agents)
 IT 817204-33-4P
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (preparation of modified fluorinated (2'R)-2'-deoxy-2'-fluoro-2'-C-Me nucleoside analogs as antiviral agents)
 RN 817204-33-4 CAPLUS
 CN Cytidine, 2'-deoxy-2'-fluoro-2'-methyl-, (2'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 817204-38-9P 817204-42-5P 817204-43-6P

817204-45-8P

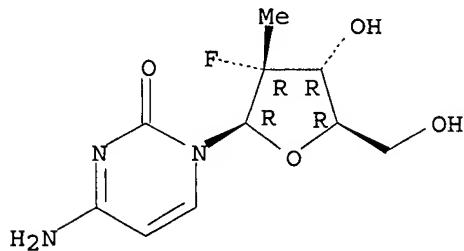
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of modified fluorinated (2'R)-2'-deoxy-2'-fluoro-2'-C-Me nucleoside analogs as antiviral agents)

RN 817204-38-9 CAPLUS

CN Cytidine, 2'-deoxy-2'-fluoro-2'-methyl-, monohydrochloride, (2'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

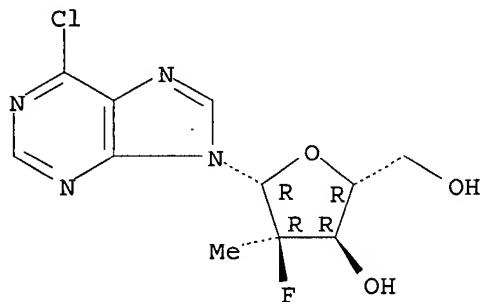


● HCl

RN 817204-42-5 CAPLUS

CN 9H-Purine, 6-chloro-9-[(2R)-2-deoxy-2-fluoro-2-methyl-β-D-erythro-pentofuranosyl]- (9CI) (CA INDEX NAME)

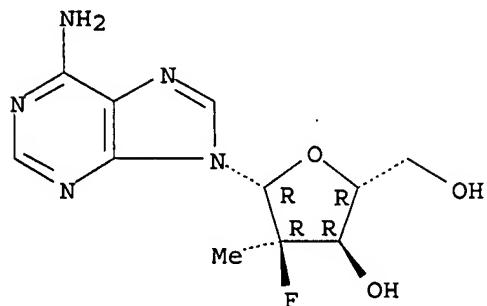
Absolute stereochemistry.



RN 817204-43-6 CAPLUS

CN Adenosine, 2'-deoxy-2'-fluoro-2'-methyl-, monohydrochloride, (2'R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

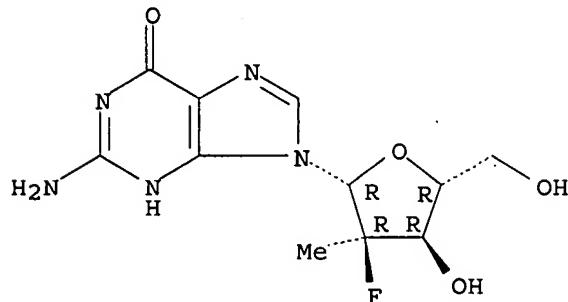


● HCl

RN 817204-45-8 CAPLUS

CN Guanosine, 2'-deoxy-2'-fluoro-2'-methyl-, (2'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



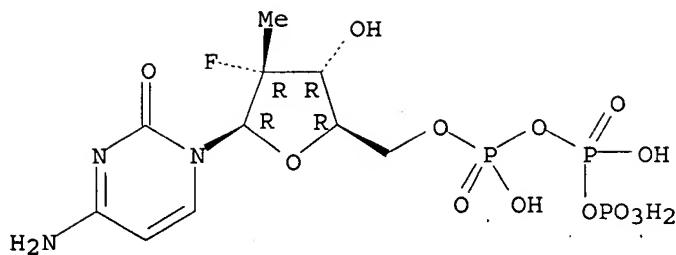
IT 817204-44-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(preparation of modified fluorinated (2'R)-2'-deoxy-2'-fluoro-2'-C-Me
nucleoside analogs as antiviral agents)

RN 817204-44-7 CAPLUS

CN Cytidine 5'-(tetrahydrogen triphosphate), 2'-deoxy-2'-fluoro-2'-methyl-,
(2'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 817204-32-3P 817204-37-8P 817204-41-4P

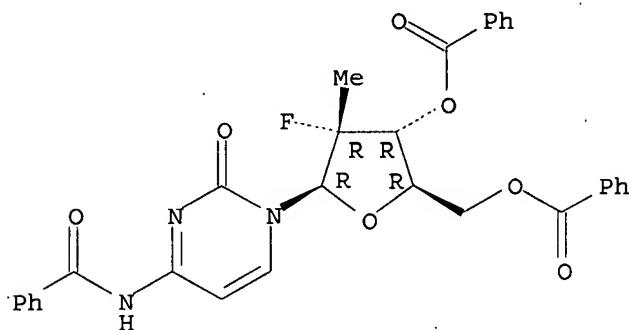
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of modified fluorinated (2'R)-2'-deoxy-2'-fluoro-2'-C-Me nucleoside analogs as antiviral agents)

RN 817204-32-3 CAPLUS

CN Cytidine, N-benzoyl-2'-deoxy-2'-fluoro-2'-methyl-, 3',5'-dibenzoate, (2'R)- (9CI) (CA INDEX NAME)

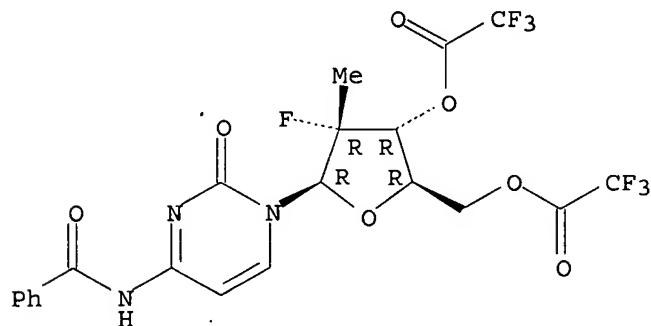
Absolute stereochemistry. Rotation (+).



RN 817204-37-8 CAPLUS

CN Cytidine, N-benzoyl-2'-deoxy-2'-fluoro-2'-methyl-, 3',5'-bis(trifluoroacetate), (2'R)- (9CI) (CA INDEX NAME)

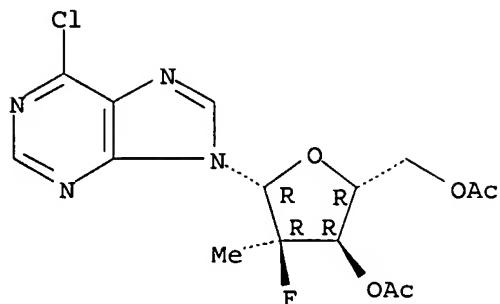
Absolute stereochemistry.



RN 817204-41-4 CAPLUS

CN 9H-Purine, 6-chloro-9-[(2R)-3,5-di-O-acetyl-2-deoxy-2-fluoro-2-methyl-β-D-erythro-pentofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> d bib ab 111 1-13

L11 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2006:316806 CAPLUS
 DN 144:331664
 TI Preparation of nucleoside analogs as antiviral agents for treating flaviviruses, pestiviruses and hepatitis C virus
 IN Sommadossi, Jean-Pierre; Gosselin, Gilles; ✓
 Storer, Richard; Egan, James
 PA Idenix (Cayman) Limited, Cayman I.; Centre National de la Recherche Scientifique
 SO PCT Int. Appl., 73 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006037028	A2	20060406	WO 2005-US34786	20050926
	WO 2006037028	A3	20060713		
				W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM	

PRAI US 2004-613085P P 20040924

OS MARPAT 144:331664

AB Nucleoside analogs I, wherein R1 is H, alkyl, acyl, phosphate A method and composition for treating a host infected with flavivirus, pestivirus or hepatitis C virus comprising administering an effective flavivirus, pestivirus or hepatitis C virus treatment amount of a described base-modified nucleoside or a pharmaceutically acceptable salt or prodrug thereof, is provided. Thus, nucleoside I (X = W = O, R1 = R2 = R4 = R6 = R7 = B = H; R3 = R5 = OH; Y = N; A = COOMe) was prepared as antiviral agents for treating flaviviruses, pestiviruses and hepatitis C virus and in particular for hepatitis C virus

infection. (no biol. data). Anti-flavivirus, pestivirus or hepacivirus activity, bioavailability in Cynomolgus monkeys, bone marrow toxicity, mitochondria toxicity, and cytotoxicity of title nucleosides were reported (no biol. data). These nucleosides can be assessed for their ability to inhibit flavivirus, pestivirus or hepacivirus polymerase activity in vitro according to standard screening methods.

L11 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2006:15810 CAPLUS

DN 144:108550

TI Preparation of 5-aza-7-deazadeazapurine and C-branched nucleosides as antiviral agents for treating Flaviviridae

IN Gosselin, Gilles; La Colla, Paolo; Seela, Frank; Storer, Richard; Dukhan, David; Leroy, Frederic

PA Idenix (Cayman) Limited, Cayman I.

SO PCT Int. Appl., 115 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006000922	A2	20060105	WO 2005-IB2768	20050623
	WO 2006000922	A3	20060526		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRAI	US 2006040944	A1	20060223	US 2005-166498	20050623
	US 2004-582182P	P	20040623		

OS MARPAT 144:108550

AB This invention is directed to a method for treating a host, especially a human, infected with hepatitis C, flavivirus and/or pestivirus, comprising administering to that host an effective amount of an anti-flavivirus or anti-pestivirus, biol. active 5-aza-7-deazadeazapurine and C-branched nucleosides I-VI, wherein A, B, and Y, each independently is H, halogen, OR₁, S(O)_n, S(O)nR₁, S(O)nR₁R₂, NR₁R₂, NR, CN, CF₃, CR₁R₂, C(W)OR₁, C(W)SR₁, C(W)NR₁R₂, NO₂, N₃, cyclic or acyclic, branched or unbranched alkyl, alkenyl, alkynyl, aryl, aralkyl, heterocycle; or A and B taken together with the carbon atoms to which they are attached may form a 4-7 membered carbocyclic or heterocyclic ring; Z is O, S, NR₁, or CR₁R₂; each V is independently N or CR₁; each R₁ and R₂ independently is H; C cyclic or acyclic, branched or unbranched alkyl, alkenyl, alkynyl, halo, O-alkyl, NH₂, NHMe, NMe₂, CN, acyl, aryl, heteroaryl, heterocycle, carbocycle, amino acid residue, or together with the atoms to which they are attached may form a 3-7 membered carbocyclic or heterocyclic ring; each W is independently O, S, or NR₁; R is independently H; sugar residue, cyclic or acyclic, branched or unbranched alkyl, alkenyl, alkynyl, acyl, aryl, or aralkyl; n is independently 0-2; . The 5-aza-7-deazapurine moiety may be substituted or un-substituted, and may comprise a non-nucleoside or nucleoside analog, or a salt or prodrug thereof. The compound of the present invention may be administered alone or in

combination with another anti-hepatitis C, anti-flavivirus and/or anti-pestivirus agent. Thus, 2-amino-8-(β -D-2-deoxyribofuranosyl)-imidazo[1.2-a]-s-triazin-4-one was prepared and tested in Cynomolgus monkeys as antiviral agent for treating Flaviviridae (EC50 > 100 μ M).

L11 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2005:1151367 CAPLUS
 TI Synthesis of 5-aza-7-deazaguanine nucleoside derivatives as potential anti-flavivirus agents
 AU Dukhan, D.; Leroy, F.; Peyronnet, J.; Bosc, E.; Chaves, D.; Durka, M.; Storer, R.; La Colla, P.; Seela, F.; Gosselin, G.
 CS Laboratoire Cooperatif Idenix, CNRS, Universite Montpellier II, Montpellier, 5, Fr.
 SO Nucleosides, Nucleotides & Nucleic Acids (2005), 24(5-7), 671-674
 CODEN: NNNAFY; ISSN: 1525-7770
 PB Taylor & Francis, Inc.
 DT Journal
 LA English
 AB Coupling suitable sugars (D- or L-ribofuranose, 2'- or 3'-deoxy sugar, branched sugars) with 2-aminoimidazo[1,2-a]-s-triazin-4-one was carried out via condensation in the presence of sodium hydride or condensation using Vorbruggen's methods. The 5-aza-7-deazaguanine nucleoside analogs, e.g. I, obtained were evaluated in cell culture expts. for the inhibition of the replication of a number of RNA viruses, including BVDV, YFV, and WNV. Modest but selective activity against BVDV was found for the β -D-ribo- and 2'-deoxy- β -D-ribo- ribofuranosyl derivs., without cytotoxicity up to 100 μ M.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2005:99345 CAPLUS
 DN 142:177053
 TI Preparation of purine nucleoside analogs for treating flaviviridae including hepatitis C
 IN Storer, Richard; Gosselin, Gilles; Dukhan, David; Leroy, Frederic
 PA Idenix Cayman Limited, Cayman I.; Centre National De La Recherche Scientifique; L'universite Montpellier II
 SO PCT Int. Appl., 139 pp.
 CODEN: PIXXD2
 DT Patent
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005009418	A2	20050203	WO 2004-IB2703	20040726
	WO 2005009418	A3	20050407		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2004258750	A1	20050203	AU 2004-258750	20040726

CA 2533367	AA 20050203	CA 2004-2533367	20040726
US 2005075309	A1 20050407	US 2004-900008	20040726
EP 1658302	A2 20060524	EP 2004-744307	20040726
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR			
NO 2006000914	A 20060425	NO 2006-914	20060224
PRAI US 2003-490216P	P 20030725		
WO 2004-IB2703	W 20040726		

OS MARPAT 142:177053

AB Title nucleosides I, wherein B is nucleobase; R is H, mono-, di-, or tri-phosphate, a stabilized phosphate, or phosphonate; X is O, S[O]n, CH, CHOH, substituted CH, NH, N-alkyl, N-alkenyl, N-alkynyl, S(O)N-alkyl, S(O)N-alkenyl, S(O)N-alkynyl, SCH-halogen; n is 0-2; R1 and R1' are independently H, OH, alkyl, azido, cyano, alkenyl, alkynyl, C(O)O-(alkyl), C(O)O-(alkenyl), C(O)O-(alkynyl), O(acyl), O(alkyl), O(alkenyl), O(alkynyl), halogen, NO₂, NH₂, NH-alkyl, NH(acyl), amide, S(O)N-alkyl, S(O)N-alkenyl, S(O)N-alkynyl, SCH-halogen; X is O, S[O]n, NH, N-alkyl, N-alkenyl, N-alkynyl, S(O)N-alkyl, S(O)N-alkenyl, S(O)N-alkynyl, or SCH-halogen; R2 and R3 are independently OH, NH₂, SH, halogen, CN, NO₂, amide, N₃, alkyl, alkenyl, alkynyl, C(O)O-(alkyl), C(O)O-(alkenyl), C(O)O-(alkynyl), O(acyl), O(alkyl), O(alkenyl), O(alkynyl), OC(O)NH, NC, C(O)OH, SCN, OCN, S(alkyl), S(alkenyl), S(alkynyl), NH(alkyl), NH(alkenyl), NH(alkynyl), an amino acid residue, a prodrug or leaving group that provides OH in vivo, or an 3-7 membered heterocyclic ring having O, S and/or N independently as a heteroatom taken alone or in combination; R2' and R3' are independently H; alkyl, alkenyl, or alkynyl; C(O)O(alkyl), C(O)O(alkenyl), C(O)O(alkynyl), amide, O(acyl), O(alkyl), O(alkenyl), halogen, halogenated alkyl and particularly CF₃, azido, cyano, NO₂, S(alkyl), S(alkenyl), S(alkynyl), NH₂, NH(alkyl), NH(alkenyl), NH(alkynyl), NH(acyl) were prepared as antiviral agents. This invention is directed to a method for treating a host, especially a human, infected with hepatitis C, flavivirus and/or pestivirus, comprising administering to that host an effective amount of an anti-HCV biol. active pentofuranonucleoside where the pentofuranonucleoside base is an optionally substituted 2-azapurine. The optionally substituted pentofuranonucleoside, or a salt or prodrug thereof, may be administered alone or in combination with one or more optionally substituted pentofuranonucleosides or other anti-viral agents. Thus, purine nucleoside II.2HCl was prepared and tested in vitro as antiviral agent. The antiviral agent is selected from the group consisting of an interferon, ribavirin, an interleukin, an NS3 protease inhibitor, a cysteine protease inhibitor, phenanthrenequinone, a thiazolidine derivative, a thiazolidine and a benzanilide, a helicase inhibitor, a polymerase inhibitor, a nucleotide analog, gliotoxin, cerulenin, an antisense phosphorothioate oligodeoxyribonucleotide, an inhibitor of IRES-dependent translation, and a ribozyme.

L11 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:965042 CAPLUS
 DN 141:395766
 TI Preparation of 5-aza-7-deazapurine nucleosides as antiviral agents for treating flaviviridae
 IN La Colla, Paolo; Gosselin, Gilles; Seela, Frank; Dukhan, David; Leroy, Frederic
 PA Universita Degli Studi di Cagliari, Italy; Centre National de la Recherche Scientifique; Universitat Osnabruck Laboratorium fur Organic and Biorganic Chemie
 SO PCT Int. Appl., 54 pp.
 CODEN: PIXXD2
 DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004096197	A2	20041111	WO 2004-IB1740	20040503
	WO 2004096197	A3	20050113		
	WO 2004096197	C1	20050414		
		W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO		

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=> d bib ab l11 5-13

L11 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:965042 CAPLUS

DN 141:395766

TI Preparation of 5-aza-7-deazapurine nucleosides as antiviral agents for treating flaviviridae

IN La Colla, Paolo; Gosselin, Gilles; Seela, Frank; Dukhan, David; Leroy, Frederic

PA Universita Degli Studi di Cagliari, Italy; Centre National de la Recherche Scientifique; Universitat Osnabruck Laboratorium fur Organic and Biorganic Chemie

SO PCT Int. Appl., 54 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004096197	A2	20041111	WO 2004-IB1740	20040503
	WO 2004096197	A3	20050113		
	WO 2004096197	C1	20050414		
		W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW		
		RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		

PRAI US 2003-467465P P 20030502

OS MARPAT 141:395766

AB This invention is directed to a method for treating a host, especially a human, infected with hepatitis C, flavivirus and/or pestivirus, comprising administering to that host an effective amount of an anti-hepacivirus, anti-flavivirus or anti-pestivirus biol. active acyclic ester or pentofurano-nucleoside that has a 5-aza-7-deazapurine nucleoside base I, wherein R1 is OH, phosphate or phosphonate, acyl, H, alkyl, sulfonate ester including alkyl or arylalkyl-sulfonyl including methanesulfonyl and benzyl, wherein the Ph group is optionally substituted with one or more substituents as described in the definition of an aryl given herein; arylsulfonyl; lipid, phospholipid; amino acid; carbohydrate; peptide; cholesterol; any of which may be O-linked; or another pharmaceutically

acceptable leaving group that when administered in vivo, provides a compound wherein R1 is independently OH or O-phosphate; each R2 and R3 independently is H or OH; Z is H, OH, SH, NH₂, halo, CF₃, alkyl, alkylamino, cyclo-alkylamino, alkoxy; Y is O, S, or NR₄; and R4 is independently hydrogen, alkyl, halo-alkyl, alkenyl, halo-alkenyl, aryl, arylalkyl, Ph or benzyl, acyl. Also claimed are pharmaceutical compns. of the present invention that may be administered alone or in combination and/or alternation with another antiviral agent, and a use of these nucleoside analogs in the manufacture of a medicament. Thus, 2-amino-8-(5-deoxy-3-D-ribofuranosyl)imidazo-[1,2-a]-s-triazin-4-one was prepared and tested in vitro as antiviral agent. Compds. can exhibit anti-flavivirus or pestivirus activity by inhibiting flavivirus or pestivirus polymerase.

L11 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:453348 CAPLUS
 DN 141:17578
 TI Treatment of Flaviviridae infection with 2'-branched nucleosides and another mutation-inducing drug such as interferon
 IN Sommadossi, Jean-Pierre; La Colla, Paolo; Standring, David; Bichko, Vadim; Qu, Lin
 PA Idenix (Cayman) Limited, Cayman I.; Universita Degli Studi Di Cagliari
 SO PCT Int. Appl., 166 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004046331	A2	20040603	WO 2003-US36714	20031117
	WO 2004046331	A3	20060302		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2506129	AA	20040603	CA 2003-2506129	20031117
	AU 2003298658	A1	20040615	AU 2003-298658	20031117
	US 2005031588	A1	20050210	US 2003-715729	20031117
	EP 1576138	A2	20050921	EP 2003-796412	20031117
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	BR 2003016363	A	20051004	BR 2003-16363	20031117
	JP 2006519753	T2	20060831	JP 2004-553823	20031117
	NO 2005002920	A	20050815	NO 2005-2920	20050615
PRAI	US 2002-426675P	P	20021115		
	WO 2003-US36714	W	20031117		
OS	MARPAT 141:17578				
AB	The present invention discloses a method for the treatment of Flaviviridae infection that includes the administration of a 2'-branched nucleoside, or a pharmaceutically acceptable prodrug and/or salt thereof, to a human in need of therapy in combination or alternation with a drug that directly or indirectly induces a mutation in the viral genome at a location other than a mutation of a nucleotide that results in a change from serine to a different amino acid in the highly conserved consensus sequence,				

XRX<u>S</u>GXXXT, of domain B of the RNA polymerase region, or is associated with such a mutation. The invention also includes a method to detect a mutant strain of Flaviviridae and a method for its treatment. Thus, in bovine viral diarrhea virus (BVDV)-infected MDBK cells treated with β -D-2'-methylcytidine, viruses resistant to the nucleoside appeared. The drug resistance was associated with a mutation in the NS5B gene which resulted in an S405T substitution in the encoded RNA-dependent RNA polymerase. These mutant viruses were sensitive to Intron A (interferon α -2b). Intron A and β -D-2'-methylcytidine exhibited synergistic inhibitory activity on BVDV growth in MDBK cells.

L11 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:20697 CAPLUS
 DN 140:87662
 TI 2'- and 3'-nucleoside prodrugs for treating Flaviviridae infections
 IN Sommadossi, Jean-pierre; La Colla, Paolo; Storer, Richard; Gosselin, Gilles
 PA Idenix (Cayman) Limited, Cayman I.; Centre National de la Recherche Scientifique; Universita Degli Studi di Cagliari
 SO PCT Int. Appl., 2498 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004003000	A2	20040108	WO 2003-IB3901	20030627
	WO 2004003000	A3	20041104		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2490200	AA	20040108	CA 2003-2490200	20030627
	AU 2003263412	A1	20040119	AU 2003-263412	20030627
	EP 1525209	A2	20050427	EP 2003-761749	20030627
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1678621	A	20051005	CN 2003-820690	20030627
	JP 2005537242	T2	20051208	JP 2004-517162	20030627
	CN 1761677	A	20060419	CN 2003-820501	20030627
	WO 2005020884	A2	20050310	WO 2004-US15395	20040514
	WO 2005020884	A3	20060622		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

EP 1656093	A2	20060517	EP 2004-776022	20040514
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
NO 2005000466	A	20050323	NO 2005-466	20050127
PRAI US 2002-392350P	P	20020628		
US 2002-392351P	P	20020628		
US 2003-466194P	P	20030428		
US 2003-470949P	P	20030514		
WO 2003-IB3901	W	20030627		
WO 2004-US15395	W	20040514		
OS MARPAT 140:87662				
AB 2' And 3'-Prodrugs of 1', 2', 3', or 4'-branched β -D or β -L nucleosides, or their pharmaceutically acceptable salts and derivs., are described which are useful in the prevention and treatment of Flaviviridae infections and other related conditions. These modified nucleosides provide superior results against flaviviruses and pestiviruses, including hepatitis C virus and viruses generally that replicate through an RNA-dependent RNA reverse transcriptase. Compds., compns., methods and uses are provided for the treatment of Flaviviridae infection, including HCV infection, that include the administration of an effective amount of the prodrugs of the invention, or their pharmaceutically acceptable salts or derivs. These drugs may optionally be administered in combination or alternation with further antiviral agents to prevent or treat Flaviviridae infections and other related conditions. Preparation of compds. of the invention is included.				
L11 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN				
AN 2004:20696 CAPLUS				
DN 140:77365				
TI Preparation of modified 2' - and 3' -nucleoside prodrugs for treating Flaviviridae infections				
IN Sommadossi, Jean-pierre; La Colla, Poalo; Storer, Richard; Gosselin, Gilles				
PA Idenix (Cayman) Limited, Cayman I.; Universita degli studi di Cagliari; Centre National de la Recherche Scientifique				
SO PCT Int. Appl., 201 pp.				
DT Patent				
LA English				
FAN.CNT 4				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 2004002999	A2	20040108	WO 2003-IB3246	20030627
WO 2004002999	A3	20040812		
WO 2004002999	C1	20050217		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2490191	AA	20040108	CA 2003-2490191	20030627
AU 2003247084	A1	20040119	AU 2003-247084	20030627
EP 1523489	A2	20050420	EP 2003-761744	20030627
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				

CN 1678621	A	20051005	CN 2003-820690	20030627
JP 2005533817	T2	20051110	JP 2004-517158	20030627
CN 1761677	A	20060419	CN 2003-820501	20030627
WO 2005020884	A2	20050310	WO 2004-US15395	20040514
WO 2005020884	A3	20060622		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1656093	A2	20060517	EP 2004-776022	20040514
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
NO 2005000465	A	20050127	NO 2005-465	20050127
PRAI US 2002-392350P	P	20020628		
US 2002-392351P	P	20020628		
US 2003-466194P	P	20030428		
US 2003-470949P	P	20030514		
WO 2003-IB3246	W	20030627		
WO 2004-US15395	W	20040514		
OS MARPAT 140:77365				
AB 2' And/or 3' prodrugs of 1', 2', 3' or 4'-branched-nucleosides I, wherein R1-R3 are independently H, phosphate, alkyl, acyl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, sulfonate ester, benzyl, wherein the Ph group is optionally substituted with one or more substituents, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, lipid, amino acid, carbohydrate, peptide, cholesterol; Y1 is hydrogen, bromo, chloro, fluoro, iodo, CN, OH, OR4, NH2, NHR4, NR4R5, SH or SR4; X1 and X2 are independently alkyl, CH3, CF3, CY3, 2-Br-Et, CH2F, CH2Cl, CH2CF3, CF2CF3, CY2CY3, CH2OH, alkenyl, alkynyl, COOH, COOR4, COO-alkyl, COO-aryl, CO-O-alkoxyalkyl, CONH2, CONHR4, CON(R4)2, halo, CN, N3, OH, OR4, NH2, NHR4, NR4R5, SH or SR5; Y is independently H, halo; and each R4 and R5 is independently hydrogen, acyl, alkyl, lower alkyl, alkenyl, alkynyl or cycloalkyl, and their pharmaceutically acceptable salts and derivs. are described. These prodrugs are useful in the prevention and treatment of Flaviviridae infections, including HCV infection, and other related conditions. Compds. and compns. of the prodrugs of the present invention are described. Methods and uses are also provided that include the administration of an effective amount of the prodrugs of the present invention, or their pharmaceutically acceptable salts or derivs. These drugs may optionally be administered in combination or alteration with further anti-viral agents to prevent or treat Flaviviridae infections and other related conditions. Thus, antiviral activity of β -D-2'-C-methyl-7-methyl-6-phenyl-3,3a,5,8a-tetrahydro-1,3,4,5,7a-penta-aza-s-indacen-8-one is reported.				

L11 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:20443 CAPLUS
 DN 140:70984
 TI 2'-C-methyl-3'-O-L-valine ester ribofuranosyl cytidine for treatment of flaviviridae infections
 IN Sommadossi, Jean-Pierre; La Colla, Paolo
 PA Idenix (Cayman) Limited, Cayman I.; Universita Degli Studi di Cagliari
 SO PCT Int. Appl., 110 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004002422	A2	20040108	WO 2003-US20431	20030627
	WO 2004002422	A3	20050407		
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2489552	AA	20040108	CA 2003-2489552	20030627
	AU 2003248748	A1	20040119	AU 2003-248748	20030627
	US 2004077587	A1	20040422	US 2003-607909	20030627
	EP 1536804	A2	20050608	EP 2003-762183	20030627
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1678326	A	20051005	CN 2003-820701	20030627
	JP 2005533824	T2	20051110	JP 2004-518041	20030627
	WO 2005020884	A2	20050310	WO 2004-US15395	20040514
	WO 2005020884	A3	20060622		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1656093	A2	20060517	EP 2004-776022	20040514
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	NO 2005000490	A	20050127	NO 2005-490	20050127
PRAI	US 2002-392351P	P	20020628		
	US 2003-466194P	P	20030428		
	US 2003-470949P	P	20030514		
	WO 2003-US20431	W	20030627		
	WO 2004-US15395	W	20040514		
OS	MARPAT 140:70984				
AB	The 3'-L-valine ester of β -D-2'-C-methyl-ribofuranosyl cytidine provides superior results against flaviviruses and pestiviruses, including hepatitis C virus. Based on this discovery, compds., compns., methods and uses are provided for the treatment of flaviviridae, including HCV, that include the administration of an effective amount of val-mCyd or its salt, ester, prodrug or derivative, optionally in a pharmaceutically acceptable carrier. In an alternative embodiment, val-mCyd is used to treat any virus that replicates through an RNA-dependent RNA polymerase. Several examples are provided of the pharmacol., mechanism of action, metabolism, side effects, and clin. efficacy of the title compound				

L11 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2003:261692 CAPLUS
 DN 138:265611
 TI Methods and compositions for treating **flaviviruses** and
 pestiviruses using 4'-modified **nucleosides**, and preparation
 thereof
 IN Gosselin, Gilles; Imbach, Jean-Louis; Sommadossi,
 Jean-Pierre
 PA Idenix (Cayman) Limited, Cayman I.; Centre National de la Recherche
 Scientifique; L'Universite Montpellier II
 SO PCT Int. Appl., 159 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003026675	A1	20030403	WO 2002-US31203	20020930
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2004006002	A1	20040108	US 2002-261327	20020930
	EP 1438054	A1	20040721	EP 2002-770551	20020930
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	JP 2005536440	T2	20051202	JP 2003-530310	20020930
PRAI	US 2001-326192P	P	20010928		
	WO 2002-US31203	W	20020930		
OS	MARPAT 138:265611				
AB	A method and composition are provided for treating a host infected with flavivirus or pestivirus, comprising administering an effective amount of a 4'-modified nucleoside, or a pharmaceutically acceptable salt or prodrug thereof. Preparation of nucleoside derivs. is described.				
RE.CNT 3	THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD				
	ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L11 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2001:886155 CAPLUS
 DN 136:590
 TI Methods and compositions using modified **nucleosides** for treating
flaviviruses and pestiviruses
 IN Sommadossi, Jean-Pierre; Lacolla, Paolo
 PA Novirio Pharmaceuticals Limited, Cayman I.; Universita Degli Studi Di
 Cagliari
 SO PCT Int. Appl., 302 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001092282	A2	20011206	WO 2001-US16687	20010523
	WO 2001092282	A3	20020502		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
 RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
 UZ, VN, YU, ZA, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 CA 2410579 AA 20011206 CA 2001-2410579 20010523
 EP 1294735 A2 20030326 EP 2001-952131 20010523
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 US 2003060400 A1 20030327 US 2001-863816 20010523
 US 6812219 B2 20041102
 BR 2001011196 A 20040406 BR 2001-11196 20010523
 JP 2004510698 T2 20040408 JP 2002-500895 20010523
 NO 2002005600 A 20030117 NO 2002-5600 20021121
 ZA 2002010112 A 20040623 ZA 2002-10112 20021212
 US 2004063622 A1 20040401 US 2003-602693 20030620
 US 2004097462 A1 20040520 US 2003-602692 20030620
 US 7101861 B2 20060905
 US 2004102414 A1 20040527 US 2003-602694 20030620
 US 2006166865 A1 20060727 US 2003-602135 20030620
 PRAI US 2000-207674P P 20000526
 US 2001-283276P P 20010411
 US 2001-863816 A3 20010523
 WO 2001-US16687 W 20010523
 OS MARPAT 136:590
 AB A method and composition are provided for treating a host infected with flavivirus or pestivirus, comprising administering an effective amount of a 1', 2' or 3'-modified nucleoside or a pharmaceutically acceptable salt or prodrug thereof.

L11 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2001:617773 CAPLUS
 DN 135:175346
 TI Method for the treatment or prevention of flavivirus infections using nucleoside analogues
 IN Ismaili, Hicham Moulay Alaoui; Cheng, Yun-Xing; Lavallee, Jean-Francois; Siddiqui, Arshad; Storer, Richard
 PA Biochem Pharma Inc., Can.
 SO PCT Int. Appl., 51 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001060315	A2	20010823	WO 2001-CA197	20010219
	WO 2001060315	A3	20030116		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

CA 2400274	AA	20010823	CA 2001-2400274	20010219
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003523978	T2	20030812	JP 2001-559414	20010219
NZ 521210	A	20041126	NZ 2001-521210	20010219
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US 2001-785235	A1	20010220		

OS MARPAT 135:175346

AB The present invention relates to a method for the treatment or prevention of Flavivirus infections using nucleoside analogs in a host comprising administering a therapeutically effective amount of the nucleoside analog or a pharmaceutically acceptable salt thereof.

L11 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:338330 CAPLUS

DN 134:348243

TI Method for the treatment or prevention of **Flaviviridae** viral infection using nucleoside analogs

IN Storer, Richard

PA Biochem Pharma Inc., Can.

SO PCT Int. Appl., 76 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001032153	A2	20010510	WO 2000-CA1316	20001103
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2389745	AA	20010510	CA 2000-2389745	20001103
	EP 1225899	A2	20020731	EP 2000-974218	20001103
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
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	WO 2000-CA1316	W	20001103		

OS MARPAT 134:348243

AB A method is provided for treating or preventing a Flaviviridae viral infection in a host comprising administering a therapeutically effective amount of at least one nucleoside analog (Markush included). Preparation of nucleoside analogs is described.

Tr. Miss. McIntosh 39/600, 907

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 DEL HIS Y
 ACT MCINTOSH/A

 L1 STR
 L2 25 SEA SSS FUL L1

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 L3 7 SEA ABB=ON PLU=ON L2
 D SCAN TI

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 D QUE STAT L2

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 D QUE STAT L2

FILE 'CAPLUS' ENTERED AT 09:32:53 ON 07 SEP 2006
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 D .CA HITSTR L3 1-7
 E STORER R/AU

L4 229 SEA ABB=ON PLU=ON STORER R?/AU
 E GOSSELIN G?/AU

L5 317 SEA ABB=ON PLU=ON GOSSELIN G?/AU

L6 213 SEA ABB=ON PLU=ON SOMMADOSSI J?/AU

L7 694 SEA ABB=ON PLU=ON (L4 OR L5 OR L6)

L*** DEL 0 S L7 AND L2

L8 0 SEA ABB=ON PLU=ON L7 AND L3

L9 411390 SEA ABB=ON PLU=ON NUCLEOTID?/OBI OR NUCLEOSID?/OBI OR
 FLAVIVIR?/OBI

L10 242 SEA ABB=ON PLU=ON L9 AND L7

L*** DEL 0 S L10 AND FLAVIR?

L11 13 SEA ABB=ON PLU=ON L10 AND FLAVIVIR?/OBI
 D QUE STAT NOS L11
 D BIB AB L11 1-13
 D BIB AB L11 5-13

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